

CLAIMS:

- 1           1. A method for controlling fungal organism, comprising applying a  
2     formulation including a microbial inoculant *Bacillus licheniformis*, strain SB3086.  
3     having the identifying characteristics of ATCC Strain 55406.
- 1           2. The method of claim 1 wherein the microbial inoculum is in the form of  
2     concentrated spores.
- 1           3. The method of claim 1 where the microbial inoculum is in the form of  
2     active, vegetative cells.
- 1           4. The method of claim 2, wherein said strain is present as concentrated  
2     liquid spores ranging from about  $1 \times 10^4$  to about  $1 \times 10^{12}$  CFU/ml.
- 1           5. The method of claim 2, wherein said strain is present as concentrated  
4     dried spores ranging from about  $1 \times 10^5$  to about  $1 \times 10^{13}$  CFU/g.
- 1           6. The method of claim 1, applying said formulation which further includes  
2     nontoxic amount of a surfactant, a preservative, plant nutrients and optionally a  
3     biosupplement.
- 1           7. The method of claim 6, applying said formulation in a form suitable for  
2     application to plants, seeds, or vegetative propagules.
- 1           8. The method of claim 7, wherein said strain is present in an amount  
2     effective against damage to plants by fungal disease.
- 1           9. The method of claim 8, applying said formulation as a dust, spray, a  
2     granule, a powder or a liquid.
- 1           10. The method of claim 9, applying said formulation to the shoot, leaf, seed,  
4     vegetative propagules or root.
- 1           11. The method of claim 9, applying said formulation as a soil treatment.
- 1           12. The method of claim 1, wherein said strain is present in an amount  
3     effective against fungi, other than plant pathogenic fungi.
- 1           13. The method of Claim 12 wherein said fungi, other than plant pathogenic  
2     fungi, is *Aspergillus niger*

1        14. The method of claim 13, applying said formulation as a dust, spray, a  
2 granule, a powder or a liquid.

1        15. The method of claim 14, applying said formulation in an amount  
2 effective against surface contamination by *Aspergillus niger*.

1        16. A method for enhancing biofungicidal activity of a microbial agent,  
2 comprising applying a microorganism capable of producing a fungicidal agent, with  
3 a nutrient formulation that enhances biofungicidal activity of said microorganism.

1        17. The method of claim 16, wherein said formulation includes nontoxic  
2 amount of a surfactant, a preservative, plant nutrients and optionally a  
3 biosupplement.

1        18. The method of claim 16, wherein said nutrient formulation is 710-140  
2 without SB3086.

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